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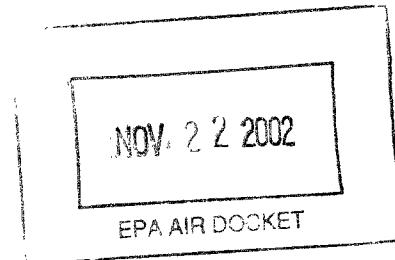
Control Technology Center

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WOOD PRODUCTS IN THE WASTE
STREAM--CHARACTERIZATION
AND COMBUSTION EMISSIONS
Volume 1. Technical Report



control technology center



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**Wood Products in the Waste Stream - Characterization and Combustion
Emissions**
Volume 1, Technical Report

Control Technology Center

Sponsored by:

Emission Standards and Engineering Division
Office of Air Quality and Planning and Standards
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Research Triangle Park, NC 27711

Air and Energy Engineering Research Laboratory
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**Wood Products in the Waste Stream - Characterization and Combustion
Emissions**
Volume 1, Technical Report

By:

Richard S. Atkins
Environmental Risk Limited
120 Mountain Avenue
Bloomfield, CT 06002
and
Christine T. Donovan
C.T. Donovan Associates, Inc.
P.O Box 5665
22 Church Street
Burlington, VT 05402

Subcontractors to :

New York State Energy Research and Development Authority
2 Rockefeller Plaza
Albany, NY 12223

EPA Cooperative Agreement CR815271

EPA Project Officer:

Robert C. McCrillis
Air and Energy Engineering Research Laboratory
Research Triangle Park, NC 27711

Prepared for:

U.S. Environmental Protection Agency
Office of Research and Development
Washington, D.C. 20460

ABSTRACT

Waste wood, an alternative to the combustion of fossil fuels, has raised concerns that if it is "contaminated" with paints, resins, preservatives, etc. it may generate unacceptable environmental impacts during combustion. Given the difficulty of separating the waste wood and the possible size of the resource, it is important to identify the problems associated with combustion. This project is designed to:

- Identify the quantity and quality of waste wood;
- Summarize of regulatory issues affecting the processing and combustion of waste wood for energy;
- Characterize waste-wood processing and combustion facilities;
- Characterize representative waste-wood samples; and
- Collect and analyze emission data from operating combustion facilities.

Waste wood is wood separated from the solid-waste stream and processed into a uniform-sized product that is reused for other purposes such as fuel. Specific types of waste wood described include:

- Pallets;
- Construction and demolition waste;
- Wood treated with paints or stains;
- Wood containing glues, binders, or resins;
- Wood containing plastics or vinyl;
- Wood treated with preservatives such as creosote, chloropentaphenol and chromium copper arsenate; and
- Wood treated with pesticides or fungicides.

This study, completed in mid-1992, describes research about technical, public policy, and regulatory issues that affect the processing and combustion of waste wood for fuel.

The project's purpose was to provide environmental regulators, project developers, and others with data to make informed decisions on the use of waste wood materials as a combustion resource. Potential environmental problems and solutions were identified.

A specific project result was the identification of combustion system operation parameters and air pollution control technologies that can minimize emissions of identified air and solid waste contaminants from combustion of waste wood.

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**WOOD PRODUCTS IN THE WASTE
STREAM--CHARACTERIZATION
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Volume 2. Appendices

control technology center



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By:

Richard S. Atkins
Environmental Risk Limited
120 Mountain Avenue
Bloomfield, CT 06002
and
Christine T. Donovan
C.T. Donovan Associates, Inc.
P.O Box 5665
22 Church Street
Burlington, VT 05402

Subcontractors to :

New York State Energy Research and Development Authority
2 Rockefeller Plaza
Albany, NY 12223

EPA Cooperative Agreement CR815271

EPA Project Officer:

Robert C. McCrillis
Air and Energy Engineering Research Laboratory
Research Triangle Park, NC 27711

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Office of Research and Development
Washington, D.C. 20460

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